phase of pediatrics, and using the top-milk method describes fully the modification of cow's milk for infant feeding. While it might be said that top-milk feeding will not always prove practical or economical in dispensary practice or among the poor where ignorance and cost have to be borne in mind, to meet the indications that the author has so exceptionally well pointed out, top-milk feeding is necessary. Moreover, it keeps in the mind of the physician the percentages he is using, a necessity that cannot be too emphatically insisted upon. The feeding beyond the first year has been carefully planned in this volume, and is worthy of careful reading. So little attention is sometimes given to the diet necessary to full development and health of the run-about child.

Congenital anomalies and diseases of the newborn, disturbances of nutrition and infectious diseases are well considered and of particular value to the practitioner is the completeness of detail given in connection with treatment. It is of further value in that reference can be found to many of the unusual conditions and diseases of infancy and childhood not mentioned in the books of similar character.

It is fitting in this instance to give praise to the publishers for the unusual attractiveness of the book and its arrangement. The plates and engravings are new and are taken from actual cases of the author, and exceptionally well illustrate the text.

C. N. S.

THE SCHOOL CHILDREN OF ENGLAND. The Annual Report for 1917 of the Chief Medical Officer of the Board of Education of Great Britain. London.

THE last, 1917, annual report of Dr. George Newman, the chief medical officer of the Great Britain Board of Education, has as usual much of interest for us. Two sections are especially worthy of comment. The first is the discussion of the effects of war on the children in the schools. The difficulty in keeping up the School Medical Service because of the depletion of the staff of medical men and nurses and the evil effect of child employment and the occupation of mothers in industry are mentioned. The greatest apprehension, however, was felt by school medical officers that the health of children would suffer from certain conditions arising from the war. These conditions were the food rationing, especially the restriction of fat and sugar, the high price of food, the lessening of parental control, daylight saving and air raids. In regard to food, Dr. Newman reports that more or less general inquiries have been made, and that, so far as the school children are concerned, there is little evidence of serious injury.

In London, the percentage of children found in poorly nourished

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condition in the third term of 1917 was considerably less than half the percentage found in 1913, the year before the war.

"The progressive reduction in the number of the children found with poor nutrition has been maintained," writes Dr. Hamer, the Medical Officer for London, "the figures in this respect being better for 1917 than 1916, and for leavers less than half the pre-war figures. It is noteworthy that this reduction has been continued right up to the end of 1917, and that the figures for the third term of that year are the best in this respect that have ever been attained. On the other hand, the percentage of children returned as of good nutrition as opposed to fair nutrition only, has shown diminution. This is no doubt to be explained by the anxiety of many parents to fall in with the voluntary rationing schemes suggested by the Food Controller."

Year.	Intermediate.								
	Boys.			Girls.					
	Good.	Fair.	Poor.	Good.	Fair.	Poor.			
1913	22.0	62.2	15.8	25.1	61.4	13.5			
1914	19.9	70.1	10.0	22.8	68.2	9.0			
1915	21.1	69.8	9.1	23.3	69.0	7.7			
1916	23.6	67.0	9.4	26.4	65.6	8.0			
1917	20.9	70.6	8.5	22.3	70.2	7.5			

Year.	Leavers.								
	Boys.			Girls.					
	Good.	Fair.	Poor.	Good.	Fair.	Poor.			
1913 1914	26.4 26.4	58.9 61.1	14.7 12.5	30.6 29.9	55.1 58.6	14.3 11.5			
1915 -	29.0	63.8	7.2	32.8	60.9	6.3			
1916 1917	29.4 27.1	63.8 66.7	6.8 6.2	31.4 28.5	62.3 65.2	6.3 6.3			

The consensus of opinion is that the school children are generally in a better nourished condition than before the war. One deleterious result of war seems to be a general increase in uncleanliness among children, especially in the percentage in verminous heads and bodies. This is attributed to lack of parental supervision and partly to the introduction of infection from returning troops.

Air raids apparently had slight if any effect on the nervous com-

plaints of school children in London.

The effect of the Daylight Saving Act in some areas resulted in depriving children of an hour of sleep, though the complaints in the second year of its operation were greatly reduced.

There seems little doubt that the wonderful result of checking growing malnutrition in London school children in the midst of war conditions was due largely to the provisions of the Education (Provision of Meals) Act, 1906, and the amending Act of 1914. which enabled the Local Education Authority to feed any children in the public elementary schools, even on holidays and on other days when the school is not open. These meals may be given free of charge, or parents and guardians may be made to pay, and the Exchequer provides a grant-in-aid not exceeding one-half of the expenditure approved. The number of necessitous children fed under the provisions of the Act reached a maximum in 1914, of 422,401, with a total of 29,560,316 meals in the year 1914-1915.

With the distribution of separation allowances and the rise in wages, the number of necessitous children being fed fell until, in 1917-18, it was less than that at any other period since 1906. A large number of children whose parents or guardians were able to pay all or something for these meals were being fed in 1917; this was partly because a large number of mothers were away from home during the mid-day meal.

Slightly more than one-half of all the school feeding takes place in London. In 1916-17, 34,389 London children were given altogether 2,460,884 meals, at a cost to the Local Education Authorities of £57.148.

These figures should be taken into consideration with the ones previously cited showing the decrease of serious malnutrition in the London schools. It is possible that had more of such assistance been possible in this country the recent increase in malnutrition reported among the school children might have been checked. For instance, the increase in New York City schools from 5 per cent. in 1914 to 21 per cent. in 1917 might have been prevented.

That Dr. Newman fully realizes the importance of other factors than food in the health of the child is shown in his summary of the points other than medical treatment to be considered in a school clinic—a health center, if the child is to be properly educated and equipped. These issues, which he refers to as "elementary but

essential." are:

"(a) The hygiene of the child, a healthy way of life; (b) the feeding of the child, by the parent or under the Education (Provision of Meals) Acts, or otherwise; (c) the supply of fresh air for the child by means of open-air schools, playground classes, or adequately ventilated schoolrooms; (d) the exercise of the child's body, by the adoption of an effective system of physical training; (c) the warmth and protection of the child, by requiring that it shall be sent to school properly clothed and that the schoolroom is sufficiently heated; (f) an adequate amount of rest for the child by day as well as at night; and (g) the maintenance of the cleanliness of the child, by ensuring that dirty and verminous children do not contaminate 710 REVIEWS

clean children at school, and that for the school itself bath and lavatory accommodation is available."

The second section of special interest to us is the report of an inquiry into the physical condition of town and country children.

This experiment was of the following nature:

"Two sets of 300 unselected elder children each, in typical London and Country Schools, to be inspected by one competent and experienced medical officer of unquestioned authority, examining all 600 children on one schedule and by one standard, a 'surprise' examination, without notice or warning, to include absent children as well as those in attendance at school, and to have regard to the effect of the physical condition of the child on its education."

The result of this examination is as follows:

Of 438 children examined, including 273 from London (145 boys and 128 girls) and 165 from the country (87 boys and 78 girls):

- 12.1 per cent. were ill-nourished. 26.5 per cent. had nits in the hair.
 - 4.6 per cent, had verminous heads.
- 19.2 per cent. unclean bodies.
- 7.5 per cent. had verminous bodies.
- 43.1 per cent. had slightly carious teeth.
- 6.2 per cent. had extremely decayed teeth.
- 11.4 per cent. had serious defects of the nose and throat including enlarged tonsils, adenoids and mouth breathing.
 - 3.4 per cent. had external eye disease.
- 10.3 per cent had serious defect of vision (less than half normal vision in both eyes).
 - 4.1 per cent. had suppurative ear disease.
 - 6.4 per cent. had less than half normal hearing.
 - 4.6 per cent. had heart defects.
 - 2.5 per cent. had lung trouble, in some cases probably tuberculosis.
 - 1.8 per cent. had manifestations of rickets.
 - 4.6 per cent, had enlarged thyroid.
- 2.1 per cent. had other deformities (Erb's palsy, etc.)
- 4.6 per cent. had spinal curvature.
- 6.6 per cent, had flat foot.
- 6.6 per cent. had anemia.
- 4.6 per cent. had skin disease.
 - .2 per cent., one case of congenital syphilis.

Only defects of a severe degree exerting a serious effect upon the child were recorded and even then about one in five of the children examined was recorded with some defect largely remediable in nature.

The most remarkable differences were found to exist in the country and in the city in the condition of the teeth and defects of the nose and throat. While 60 per cent. of the London children had

sound teeth, only 35.1 of the country children were in the same condition. Adenoids were three to four times more frequent in the country group.

There were no striking differences in malnutrition although the country children were rosier and superior in general carriage and were freer of septic infections of the skin, the eyes, and the ears.

Many of the children examined were much behind in their studies, but the amount of defect was no greater in London in the poor class school than in the fair and good class schools due possibly to more energetic "follow-up" work.

This entire report by Dr. C. Thomas is most interesting and gives a good basis of comparison with conditions found in the schools in this country, and with Dr. Thomas D. Wood's estimate of the

percentage of defects in our school children.

Unfortunately Dr. Thomas's report is not dated. It would be interesting otherwise to compare his percentage of poor nutrition in the three typical London schools given as 11.3 with that given, from 1913 to 1917, for all the London schools and specially for the intermediate grades, generally considered the worst so far as nutrition is concerned. The discrepancy between the figures for those leaving school, 6.2 per cent. in 1917, and the pre-war figure of 14.7 and Dr. Thomas's "control experiment" of 11.3 demands explanation.

Collected Papers of the Mayo Clinic. Edited by Mrs. M. H. Mellish. Vol. IX, 1917. Pp. 831; 328 illustrations. Philadelphia and London: W. B. Saunders Company.

WE have here presented the various papers published by the workers in the Mayo Clinic during 1917. Although the clinic is essentially surgical, the papers are not all surgical, the medical men and laboratory workers also presenting the results of their interesting and valuable studies. Their investigations, in the main, originate from questions arising out of the material coming to and furnished by the surgical clinic. It is this wealth of material drawn to Rochester by the fame of the Mayos which furnishes the appeal of these papers. Out of it all come many new phases of old conditions and many new demands upon the ingenuity of the surgeons who are frequently brought face to face with unlooked-for complications. Surgeons everywhere meet with similar difficulties and all are keen to know how the Mayos and their associated workers manage them. The clinical papers deal generally with subjects made interesting by some problem encountered at operation. As in preceding volumes the papers are collected according to the part of the body involved, a final group including those on general subjects. It is of interest that more space in this volume is given to papers on the